

### The ambivalence of New Technologies

*scientific innovations and responsibilities* -NEW TECHNOLOGIES: Any set of productive techniques which offers a significant improvement (whether measured in terms of increased output or savings in costs) over the established technology for a given process in a specific historical context. Or is it?

	Are technologies always for the best?
At the end of the Unit, I will	<ul style="list-style-type: none"> <li>- have learned about some major progress in technologies</li> <li>-discover new (useful?) items</li> <li>- given a thought to the meaning of technologie</li> </ul>
What vocabulary will I need ?	<ul style="list-style-type: none"> <li>- supposition</li> <li>- technologie</li> </ul>
What grammatical structure will I need ?	<ul style="list-style-type: none"> <li>- past simple</li> <li>- past perfect</li> <li>- questions</li> </ul>
What documents will be used ?	<p><b>1- Making house smarter</b>            1a- Washing machines: the best invention in the world            1b- smart devices: roomba, toaster, diapers, egg minder, trash can            1c- smart home</p> <p><b>2- Mobility at stake</b>            2a- self driving cars            2b- thermo cars vs electric cars            2c- cars vs bikes            2d- proposing a New Vision</p> <p><b>3- The drawback of technology</b>            3a- The entire history of You, Charlie Brooker, <i>Black Mirror, season 1 episode 3</i> (2011)            3b- Discovering a new world, Jim Morris, <i>Wall-E, Walt Disney pictures</i> (2008) – extract 1            3c- Back to reality, Jim Morris, <i>Wall-E, Walt Disney pictures</i> (2008) – extract 2</p> <p><b>4- Back to the past ? (season 1ère, Hachette)</b>            4a- illustration vinyl (season 1ère p 143)            4b- Old style, new Style, Ira Wargler, <i>Growing up Amish</i> (2011)            4c- Amish identity, Donald B.Kraybill, Karen M. Johnson-Weiner, and Steven M. Nolt, <i>The Amish</i> (2013)</p>

	<p><b>5- Technology's challenges tackled</b>                      5a- Tomorrow's technology today                      5b1- 5b2-The War for Energy: Us consumption 2019 /2020                      5b3 – Percentage of electricity produce from renewable sources in the UK                      5b4- Global Primary Energy Consumption by Region 2010-2050                      5c- Malta: water scarcity is a fact of life, Interview of Manuel Sapiano, Chief Policy Officer (Water) Energy and Water Agency, Malta</p> <p><b>6- Get ready for your 3-step-Final-Task</b>                      6a- find a new device                      6b- promote a new device                      6c- interview about the usefulness of the device</p>
What will I learn about ?	<ul style="list-style-type: none"> <li>- how despite technologies some stereotypes still remain</li> <li>- how unuseful some technologies might be</li> <li>- how some people'd rather cling to the past technologies for wish of a better world</li> </ul>
Final Task : EOI	You will be interviewed about the usefulness of a device invented and promoted by another group

**Instructions for your final task:**

This task will be divided into 3 parts. Each part will be graded

- 1- You will invent and promote a new technology device
- 2- You will promote another's group device and make an ad or a spoof ad
- 3- You will be interviewed by the inventors of the device after seeing the advertisement.
- 4- Each invention may be invented by pairs
- 5 – Each ads may be done by groups from 3 to 5 people
- 6- Each interviewer will be questioned by a different inventor
- 7- You will discover the device along with everyone else during the class (no preparation time for the questions nor the answers)

**The ambivalence of technologies**

**1- Washing machines: the best invention in the world**

travail sur les posters: description / remettre le texte en accord avec le poster et proposer un slogan  
 mise en parallèle avec les slogans d'origine (doivent expliquer leur choix)

<https://view.genial.ly/6422bc43f0044c0011964951/interactive-content-genially-sans-titre>

1b- smart devices:

distribution d'une vidéo au hasard – liste de mots à caser pour une bande son – on échange les propositions des groupes, à charge pour un autre groupe de proposer une bande son.

Bande son enregistrée sur vocaroo ou autre, écouter en classe – chacun propose quel objet correspond à la bande son

1- roomba

<https://www.youtube.com/watch?v=sKeCnan2m6w>

2- toaster:

<https://www.youtube.com/watch?v=8pf4g1WIYuE>

3- diapers:

<https://www.youtube.com/watch?v=82WPxv6WzJs>

4- egg minder:

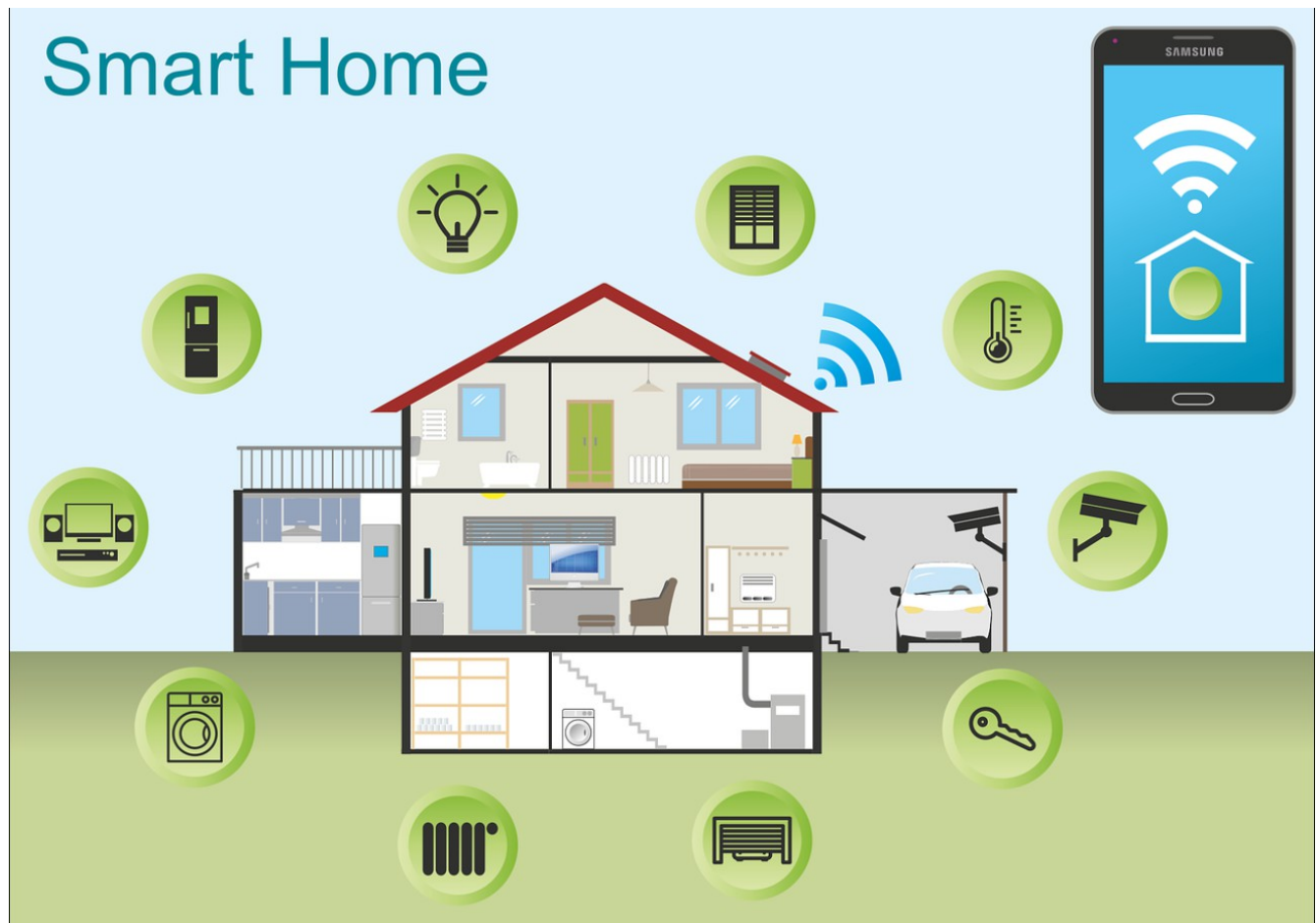
[https://www.youtube.com/watch?v=\\_9tVckcCz-c](https://www.youtube.com/watch?v=_9tVckcCz-c)

5- trash can:

<https://www.youtube.com/watch?v=vPYozpbGRPU>

**1c- smart home:**

travail sur image: repérage et choix de différents éléments : pub audio à faire sur 3 éléments de son choix, 5 maximum. Enregistrement sonore / repérage des différents éléments par rapport à la photo



## 2- Mobility

lister points positifs et points négatifs puis mettre en débat → travail de repérage à partir des vidéos. **Prise de note en CO**

- self driving cars [https://www.youtube.com/watch?v=G2OU\\_lzsMdE](https://www.youtube.com/watch?v=G2OU_lzsMdE)

- thermo cars vs electric cars : <https://www.youtube.com/watch?v=f1vnKKPERZk>

ou <https://www.youtube.com/watch?v=iKAEjjx2lCU&t=2s>

- cars vs bike : video LA bike or car:

[https://drive.google.com/file/d/1Yn3yYeB7X36YaVPA6gcDbOnMGFM4AR2W/view?usp=share\\_link](https://drive.google.com/file/d/1Yn3yYeB7X36YaVPA6gcDbOnMGFM4AR2W/view?usp=share_link)

## 3- the drawback of technologies

a- the entire history of view saison 1 épisode 3: on regarde le début : on liste les points positifs supposition sur les pt négatifs?

Puis on voit la fin

débat sur l'utilité ou pas du chip

ou vidéo youtube recap si pas accessible: <https://www.youtube.com/watch?v=4SpPxpoy82w>

3b- Discovering a new world, Jim Morris, *Wall-E*, Walt Disney pictures (2008) – extract 1

[https://drive.google.com/file/d/1xsdaxVNfbirkEdv05wkov\\_uhxLt-3mQk/view?usp=share\\_link](https://drive.google.com/file/d/1xsdaxVNfbirkEdv05wkov_uhxLt-3mQk/view?usp=share_link)

video complète:

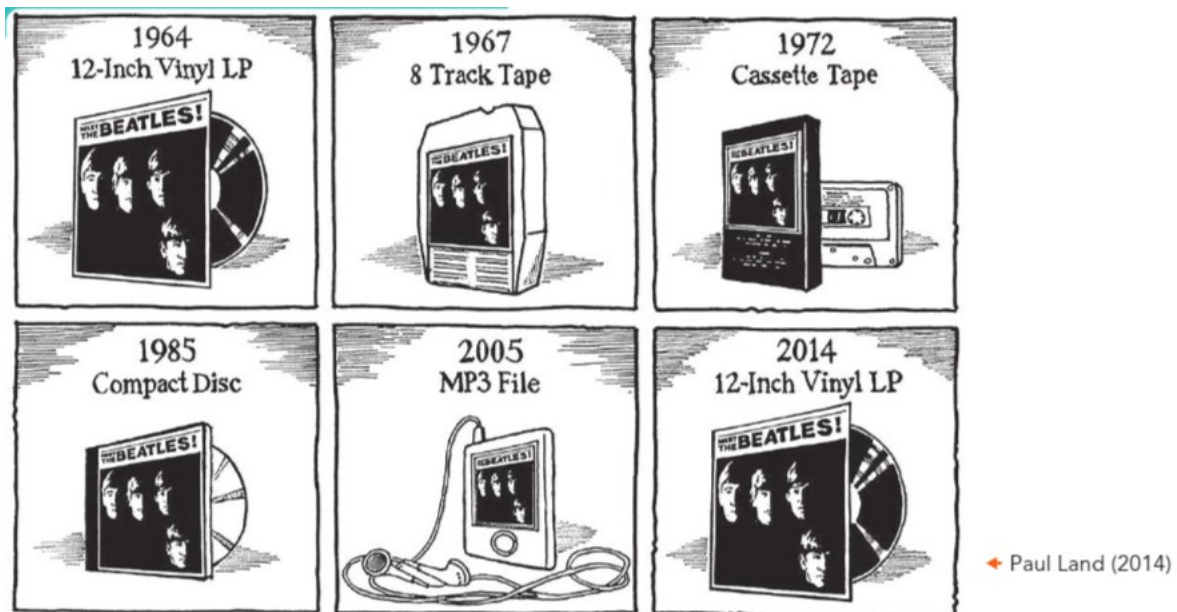
<https://www.youtube.com/watch?v=s-kdRdzxdZQ>

c- 2<sup>nd</sup> partie: imaginer les pensées de la femme et / ou de Wall e tandis qu'elle réaliser ce qui lui arrive

[https://drive.google.com/file/d/1IuiOpFRTlztgHycpKvIUNwBqwpzKqEn3/view?usp=share\\_link](https://drive.google.com/file/d/1IuiOpFRTlztgHycpKvIUNwBqwpzKqEn3/view?usp=share_link)

#### 4- Back to the past ? (season 1ère, Hachette)

4a- The resurrection of Vinyl, Paul Lang (2014)



4b- Old style, new Style, Ira Wargler, *Growing up Amish* (2011) – texte season mais j'ai un extrait plus long si nécessaire que je peux retaper)

**1** The Amish are so different. So visible. So quaint and old fashioned. And so ideal. At least from the outside.

It's not their fault that English society finds them endlessly fascinating. Mostly, they just prefer to be left alone.

5 A few defining factors must exist for one to be considered Old Order. First, and most critical, no cars. Horse and buggy only for local transportation. Second, no electricity. Not in the house or in the outbuildings. Third, no telephones in the house. Old Order Amish fiercely and jealously defend these boundaries.

10 Of course, there are a few other defining characteristics: all Old Order women wear long, flowing, home-sewn dresses and some sort of head covering with chin strings. The men wear homemade trousers with no belt loops and no zipper, just a large, four-buttoned, horizontal flap across the front. [...] And all the men have beards.

15 At least the married men do. A full beard is pretty much a universal requirement. But no mustache. [...]

Most Old Orders today have running water in their houses; only the plainest groups reject indoor plumbing. And some practice strict shunning of former members, while others are more relaxed about those who leave.

20 Amish life is made up of a mishmash of confusing rules about what's allowed and what's forbidden. Most of them make little sense, especially to those on the outside. They don't have to, as long as they make sense to the Amish themselves. Which, I suppose, they do.

Ira Wagler, *Growing Up Amish* (2011)

**4c- Amish identity**, Donald B. Kraybill, Karen M. Johnson-Weiner, and Steven M. Nolt, *The Amish* (2013)

**2** Limits on technology are the signature mark of twenty-first century Amish identity. Riding in horse-drawn buggies and living unplugged from the public grid unmistakably separate Amish people

5 from mainstream Americans. Yet the Amish do not categorically condemn technology. Nor are they technologically naïve. Rather, Amish communities selectively sort out what might help or harm them. The Amish modify and adapt technology in creative

10 ways to fit their cultural values and social goals. Amish technologies are diverse, complicated, and ever-changing.

Donald B. Kraybill, Karen M. Johnson-Weiner, and Steven M. Nolt, *The Amish* (2013)



**3. Read text 1 and take notes about:**

- the Amish population and where they live
  - the rules they follow
  - the elements of modern comfort they refuse to have
4. Explain what the common rules to every 'Old Order' Amish group are.
  5. Say what the rest of the population think about the Amish community and their rules.
  6. Explain how these rules are not applicable to the whole community.
  7. Read text 2 and pick out the key words that explain the Amish attitude towards technology.
  8. Share what you have understood about the two texts.

**React** **Word bank** > p. 225

9. Describe the Amish attitude towards technology.
10. Explain why the Amish community have chosen to live outside of the world. Make research to complete what Ira Wagler says.
11. Discuss why the mainstream American society finds the Amish fascinating.

Exprimer l'autorisation et l'interdiction > p. 156

→ **Recap what you have understood**

**WORK ON WORDS**

**1. Use the context**

In text 1, find the equivalents:

- l. 1-10 : strange • outmoded • carriage
- l. 7-20 : ignore

**2. Work on word formation.**

Find five adverbs in text 1 and four in text 2. Say how they are formed: give the roots and the endings. Then say what they mean.

**Play your part!**



**Act out a conversation**

- You want to unplug and spend a month in an Amish community in Pennsylvania: try to convince your reluctant friend to come along.
- Prepare your arguments.
- Then act out the conversation and record yourselves.

**5- Tomorrow's technology?**

5a- Tomorrow's technology today

**1 Science quotes**



Around one in every thousand people in the UK is an amputee and prostheses can be extremely expensive.



Indian farmers adapt to climate change.



New methods could unlock the mysteries of dementia, mental illness, and other neurological disorders.



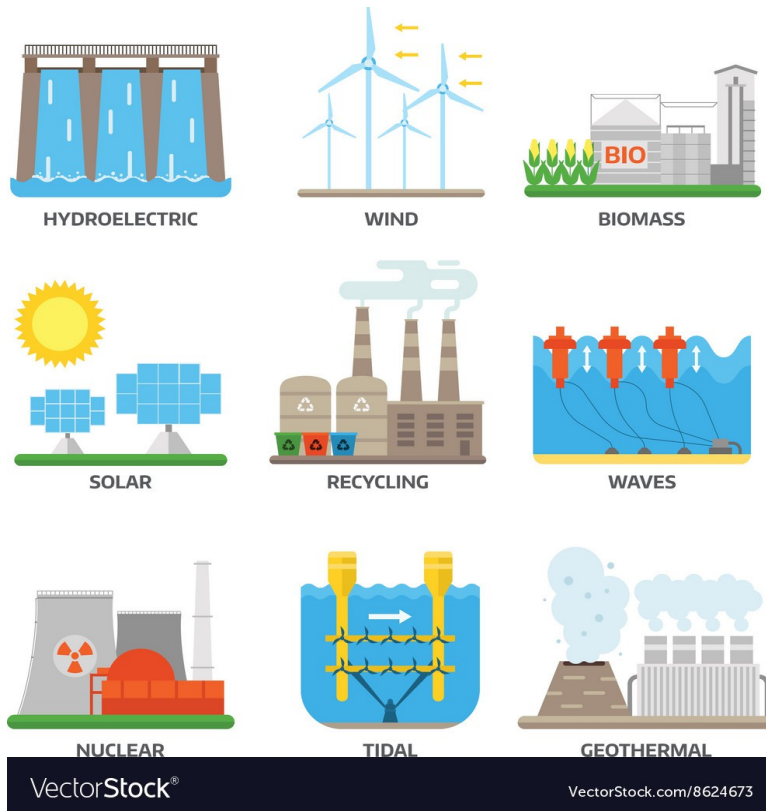
Mobile tech saves lives of Australian swimmers.

- Complete the following prompts with information from the texts above.
  - Thanks to innovative greenhouses, ...
  - Thanks to brain organoids, ...
  - Thanks to bionics, ...
  - Thanks to drones, ...
- Which innovation is the most important in your opinion?

travail sur sur l'exercice tel que proposé + debate

5b- the war for more energy

5b1- vocabulary

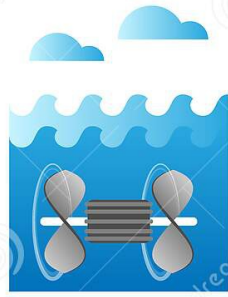


# ENERGY SOURCES

## RENEWABLE ENERGY



**Wind**



**Hydropower**



**Solar**



**Geothermal**



**Biomass**

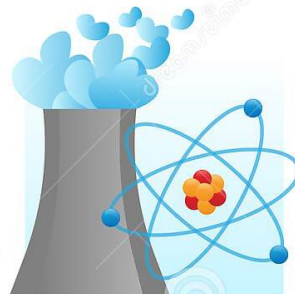
## NON-RENEWABLE ENERGY



**Oil**



**Coal**



**Nuclear**



**Natural Gas**

5b2- Us consumption 2019 /2020

5b3 – Percentage of electricity produce from renewable sources in the UK

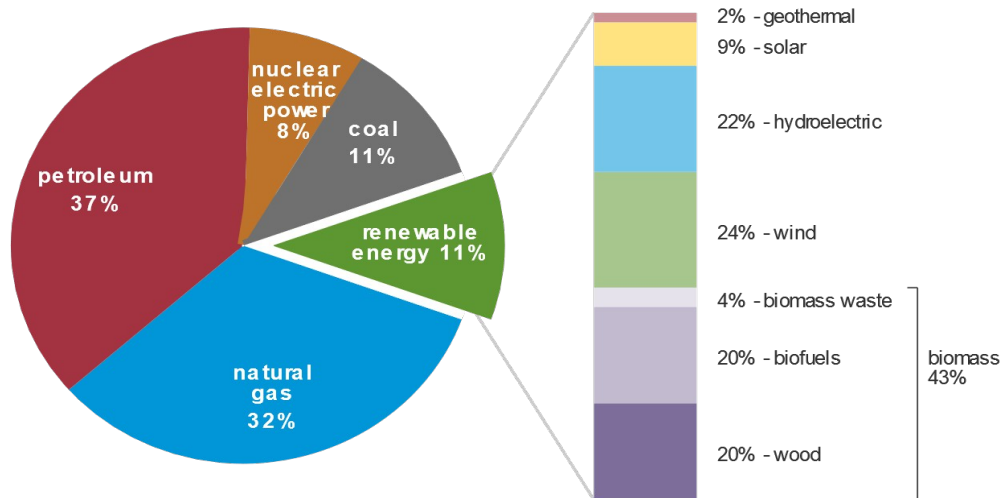
5b4- Global Primary Energy Consumption by Region 2010-2050

compare the graphs – exchange about the possible sources of renewable energy and the devices

### U.S. primary energy consumption by energy source, 2019

total = 100.2 quadrillion British thermal units (Btu)

total = 11.4 quadrillion Btu



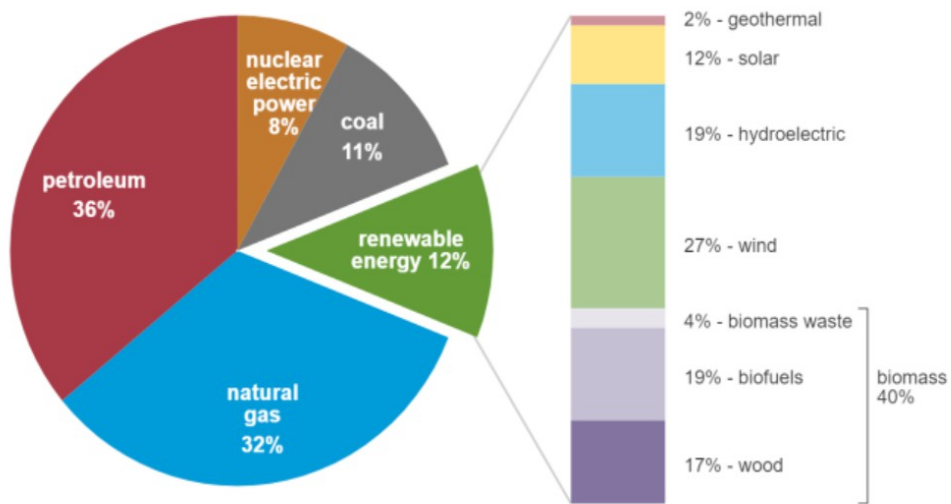
Note: Sum of components may not equal 100% because of independent rounding.  
 Source: U.S. Energy Information Administration, *Monthly Energy Review*, Table 1.3 and 10.1, April 2020, preliminary data



### U.S. primary energy consumption by energy source, 2021

total = 97.33 quadrillion British thermal units (Btu)

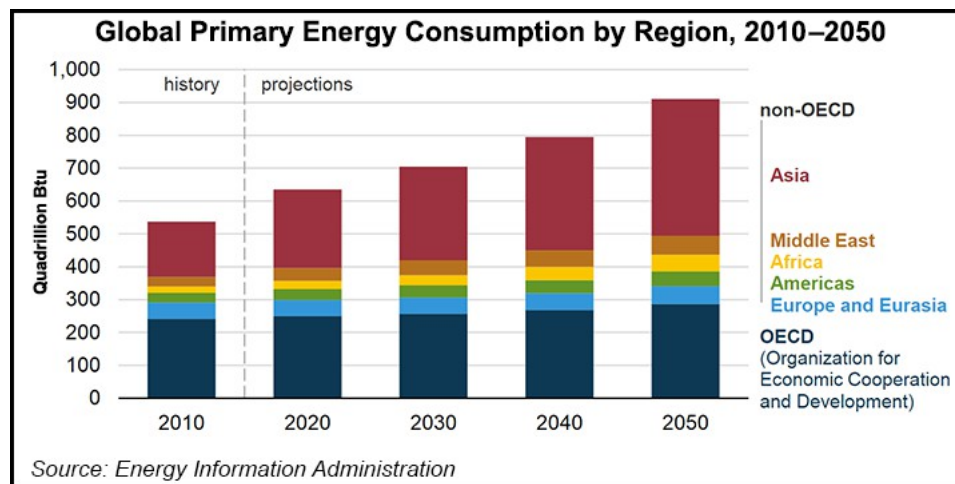
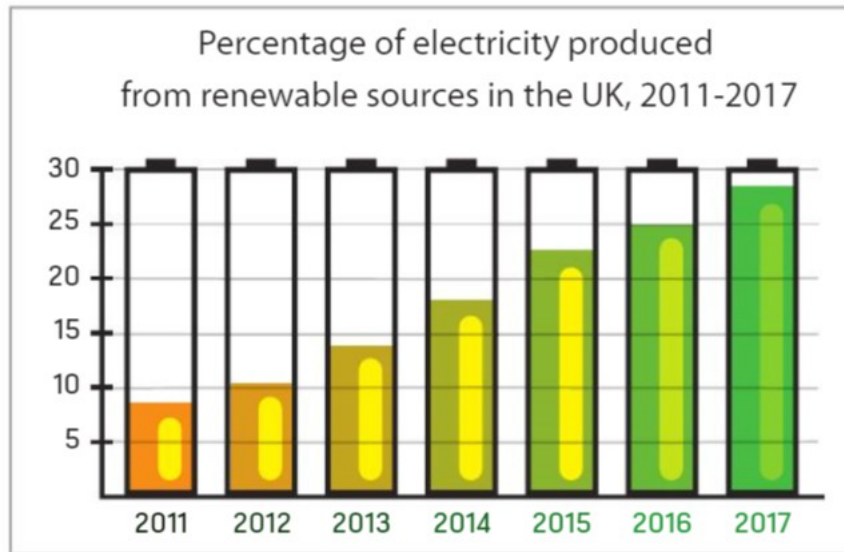
total = 12.16 quadrillion Btu



Data source: U.S. Energy Information Administration, *Monthly Energy Review*, Table 1.3 and 10.1, April 2022, preliminary data



Note: Sum of components may not equal 100% because of independent rounding.



The official founding members are: Austria Belgium Canada Denmark France Germany Greece Iceland Ireland Italy Luxembourg Netherlands Norway Portugal Spain Sweden Switzerland Turkey United Kingdom United States

During the next 12 years, Japan, Finland, Australia, and New Zealand also joined the organisation.

**5c- Malta: water scarcity is a fact of life**

**Malta: water scarcity is a fact of life**

Malta is one of the top 10 water-scarce countries in the world. What to do when nature provides only half of the water your population needs? Malta produces clean water and tries to make sure that not one drop is wasted.

**How do you tackle water scarcity in Malta?**

Due to its geographical position, water scarcity is natural in Malta. The Mediterranean climate, with low levels of rainfall and high temperatures, results in low natural water availabilities. Moreover, the density of the population in Malta is about 1 400 people per square kilometre. In other words, we have a low availability of water resources in a very densely populated area.

Nature can give only about half of our total needs. Since 1982, Malta has been producing water through desalination of seawater. Desalination has been complemented by an extensive water leak management and repair programme that our public water utility has heavily invested in since the 1990s. As a result, our current municipal water demand is about 60 % of what it was in 1992, mainly thanks to leakage management. We also introduced last year an ambitious water reuse programme to further fill in the gap between supply and demand.

There are competing demands, given that Malta's natural water resources are limited. Urban residents or farmers ask for more water, but nature also needs water. Any water management plan we develop in Malta has to ensure that nature's needs for water are respected and met.

### **Isn't desalination a very expensive solution with significant impacts on the marine environment?**

Unfortunately, since natural resources are not enough, producing freshwater is a must and not a choice for us. Moreover, desalination as a technology has gone through significant changes in recent years, particularly in terms of energy efficiency. The energy needed to produce 1 cubic metre of freshwater from seawater will be reduced to 2.8 kilowatt hours. Ten years ago that was close to 6 kilowatt hours. Desalination technology has become very efficient and the industry is continuously moving towards higher efficiency levels.

Regarding the impacts of desalination on the marine environment, this concerns mainly the discharge of brine, which is the by-product of the desalination process and is released into the sea. Our desalination plants are rather small and located in areas where there are strong marine currents. So the amount discharged is limited and gets diffused quickly.

The decision on where to install a desalination plant has to take into account many factors. The size of the plant is also important, not just from the point of view of the discharge, but also from the point of view of security of supply. Our three plants are strategically installed at different locations on the coast, mainly because, in the case of events such as an oil spill, when a plant needs to be shut down, the other two can remain in operation.

### **Given scarcity by nature, how do Maltese citizens contribute to water-saving efforts?**

Maltese citizens use around 110 litres a day per person, which is relatively low compared with other EU countries. But there are also new pressures to take into consideration. For example, up to 50 000 foreigners came to work in Malta in connection with its recent economic growth. The tourism sector has also been steadily growing and is estimated to contribute to an equivalent population of around 40 000 people. More people on the islands mean a higher demand for water. Furthermore, people have different water consumption habits. If you are accustomed to using 250 litres of water per day in a water-rich country, it is difficult to reduce it to 110 litres in a matter of days. The Energy and Water Agency is currently putting in place an extensive water conservation campaign, which takes into account such demographic and socio-economic trends to comprehensively address water demand management

Similarly, the market is helping people to consume less. For example, today it is very difficult to buy a new large-volume toilet flush-tank. When you buy a tap, most probably it will already have an aerator on it. Washing machines and dishwashers are increasingly water and energy efficient. Recycling of water also has a big saving potential, which we have started to explore.

### **How will recycled water be used?**

We are focusing on two systems: agricultural use and domestic use. The agricultural system, through polishing plants, plans to produce 7 million cubic metres of recycled water per year. This corresponds to one third of agricultural water use, according to our estimates. Another important measure is the development of small, in-field, rain water reservoirs.

At home, around 30-45 % of water is used for showering and a similar share for flushing. Using shower water, which is relatively clean, for flushing, where there is no direct contact with people, could reduce daily consumption from 110 litres to around 70 litres per person. The saving potential is immense, but our primary concern is always public health. The technology has to be safe, because ultimately it is about our health and our families' health.

Interview of Manuel Sapiano, Chief Policy Officer (Water) Energy and Water Agency, Malta,  
for [maltasustainabilityforum.com](http://maltasustainabilityforum.com), published on 30 Aug 2018

## 6- Get ready for your 3-step-Final-Task

6a- find a new device:

le groupe se consulte et propose un nouvel objet (peut être absurde)

6b- promote a new device: publicité faite par un autre groupe 2 (vidéo, audio, en live ou affiche au choix)

6c- interview about the usefulness of the device

groupe 1 interroge groupe 3 après avoir vu la vidéo – customer review

note finale sur l'interaction et l'anglais

TF proposition;

groupe 1 - invente un absurde device

Groupe 2 – présente une publicité

groupe 3- répond à un customer review du groupe 1

=> have + EN

idées en plus:

**transport: mobilité**

self driving cars

wall e

**better men : genes**

chinese clones

crispr technology

baby post mortem?

**Monitoring our every move**

Snowden

**DST:**

**trouver texte sur les climato-sceptique, les flat-earther**